UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|----------------------------------|----------------------|---------------------|------------------|
| 10/802,378 | 03/17/2004 | David T. Krick | 111548-136408 | 3802 |
| 25943 Schwabe Willia | 7590 09/20/2010 amson & Wvatt | 0 | EXAMINER | |
| PACWEST CE | NTER, SUITE 1900 | | WILSON, GREGORY A | |
| 1211 SW FIFTH AVENUE PORTLAND, OR 97204 | | | ART UNIT | PAPER NUMBER |
| | | | 3749 | |
| | | | | |
| | | | MAIL DATE | DELIVERY MODE |
| | | | 09/20/2010 | PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Ex parte DAVID T. KRICK, JOSEPH F. O'SULLIVAN, and MICHAEL S. WEST

Appeal 2009-007641 Application 10/802,378 Technology Center 3700

Before: JENNIFER D. BAHR, MICHAEL W. O'NEILL, and KEN B. BARRETT, *Administrative Patent Judges*.

BAHR, Administrative Patent Judge.

DECISION ON APPEAL

STATEMENT OF THE CASE

David T. Krick, et al. (Appellants) appeal under 35 U.S.C. § 134 (2002) from the Examiner's decision rejecting claims 1-23, 25, and 26 under 35 U.S.C. § 103(a) as unpatentable over Hampel (US 2004/0163335 A1, pub. Aug. 26, 2004) or Rapisarda (US 6,612,084 B2, iss. Sep. 2, 2003). We have jurisdiction over this appeal under 35 U.S.C. § 6 (2002).

Claim 1 is representative of the claimed invention.

1. An air grate comprising: one or more pieces of one or more materials adapted to partially cover no more than 40% of a spanned area, allowing air to flow through a plurality of openings disposed in the uncovered portion of the spanned area to meet a semiconductor device manufacturing air flow requirement, where each of the openings is sufficiently small to meet a semiconductor device manufacturing fall though object size limitation, and where the one or more materials are further adapted to meet a semiconductor device manufacturing spill protection requirement.

SUMMARY OF DECISION

We REVERSE and enter NEW GROUNDS of REJECTION.

ISSUE

Appellants raise the issue of whether the Examiner has made the requisite factual findings to demonstrate the obviousness of an air grate having the functional limitations of claim 1¹. *See, e.g.,* Appeal Br. 2. However, in reviewing the claims to determine this issue, it is clear that first

¹ Appellants note that independent claims 9, 16, and 23 have "substantially the same limitations as Claim 1." Appeal Br. 4.

a determination must be made as to whether the claims are definite and supported by a written description demonstrating possession of the claimed invention.

OPINION

Scope and Definiteness of the Claims

Claim 1 requires an air grate having a plurality of openings that is capable of performing several functions: (1) meeting a semiconductor device manufacturing air flow requirement; (2) meeting a semiconductor device manufacturing fall through object size limitation; and (3) meeting a semiconductor device manufacturing spill protection requirement. Thus, claim 1 requires a device (air grate) that meets three requirements. Each of independent claims 9, 16, and 23 recites one or more of these claim limitations. *See* note 2, *supra*.

"The primary purpose of the definiteness requirement is to ensure that the claims are written in such a way that they give notice to the public of the extent of the legal protection afforded by the patent, so that interested members of the public, e.g., competitors of the patent owner, can determine whether or not they infringe." *All Dental Prodx, LLC v. Advantage Dental Prodx, Inc.*, 309 F.3d 774, 779-80 (Fed. Cir. 2002) (*citing Warner-Jenkinson Co. v. Hilton Davis Chem. Co.*, 520 U.S. 17, 28-29 (1997)). If the language of the claim is such that a person of ordinary skill in the art could not interpret the metes and bounds of the claim so as to understand how to avoid infringement, a rejection of the claim under 35 U.S.C. § 112, second paragraph, would be appropriate. *See Orthokinetics, Inc. v. Safety Travel Chairs, Inc.*, 806 F.2d 1565, 1576 (Fed. Cir. 1986); *Datamize, LLC v.*

Plumtree Software, Inc., 417 F.3d 1342, 1350 (Fed. Cir. 2005) ("Some objective standard must be provided in order to allow the public to determine the scope of the claimed invention."); Halliburton Energy Serv., Inc., v. M-I LLC, 514 F.3d 1244, 1255 (Fed. Cir. 2008) ("the Court held indefinite claims that recited only 'inaccurate suggestions of the functions of the product.'") (citing United Carbon Co. v. Binney & Smith Co., 317 U.S. 228, 234 (1942). During prosecution, the threshold standard of ambiguity for indefiniteness is lower than it might be during litigation of an issued patent. Ex parte Miyazaki, 89 USPQ2d 1207, 1212 (BPAI 2008).

None of the independent claims set forth the actual requirements the air grate must meet to satisfy the claimed functions. Further, there is no indication in the record that there is, for example, a standard set of industry requirements such that one of ordinary skill would understand what is claimed. Reading claim 1, for example, one of ordinary skill in the art would understand that an air grate that meets air flow, fall through, and spill protection requirements could infringe on the claim. However, one of ordinary skill could not discern which particular requirements are encompassed by those claim limitations, and thus could not tell if any particular air grate infringed. Thus, we turn to the Specification to shed light on the meaning of each "requirement" limitation. *Orthokinetics, Inc.*, 806 F.2d at 1576 (the test for definiteness under 35 U.S.C. § 112, second paragraph, is whether "those skilled in the art would understand what is claimed when the claim is read in light of the specification").

The Specification and certain dependent claims provide an example for some of the requirements. For instance, the fall through requirement is elaborated in claim 4 and paragraph 24, which state that "each of the

openings ... is designed to meet an object fall through size limitation of about 1 inch." The Specification then states "each of the openings may be designed to meet smaller or larger object fall through size limitations." Thus, it is clear that the fall through requirement is related to the size of the holes in the grate. What is not clear, however, is the metes and bounds of the requirement that determines the size of the hole. The Specification's disclosure merely indicates that the requirement may require larger or smaller holes, but fails to articulate any meaningful standard to determine the requirement. The other claimed requirements are similarly not clarified in the Specification. For each, the standard by which the claimed requirements are to be measured lacks discernable boundaries.

Therefore, the claimed requirements, read in light of the Specification, do not specify to a reasonable degree a standard by which to discern if a particular air grate meets a particular requirement. The Specification's brief disclosure does not provide a qualitative metric, formula, or other guideline to allow one of ordinary skill to know when the claim limitation is satisfied. *See Halliburton*, 514 F.3d at 1255-56 (describing various ways to "resolve the ambiguities of a functional limitation"). Instead, there is a single, narrow example of a particular embodiment said to meet the claimed requirements, without guidance as to what constitutes a requirement.

Thus, the term "requirement" as used in the independent claims is not merely broad; it is indefinite². It is not relevant that one can envision

⁻

² Claim 1 is akin to a claim to "a widget comprising a thing." While the term "thing" is readily understood, and indeed, other claims may specify particular structure as being a "thing," "thing" is indefinite because it is ambiguous; it does not set forth metes or bounds for the claim. The

examples of potential requirements for air grates; what is relevant is whether one of ordinary skill would understand if a particular air grate would avoid infringement. *Morton Int'l, Inc. v. Cardinal Chem. Co.*, 5 F.3d 1464, 1470 (Fed. Cir. 1993) (the standard for definiteness is whether "the claims at issue... are ... sufficiently precise to permit a potential competitor to determine whether or not he is infringing"). Given these claims, this task is impossible because, as demonstrated above, there are no metes and bounds to the claimed requirements. In addition, the dependent claims, which incorporate the limitations of the independent claims, are likewise indefinite because none of the dependent claims sets forth the metes and bounds of each claimed requirement. Therefore, we enter a new ground of rejection under 35 U.S.C. § 112, second paragraph, of claims 1-23, 25³, and 26 as indefinite for failing to particularly point out and distinctly claim the subject matter Appellants regard as their invention.

Written Description

One purpose of the specification is to describe the invention an applicant seeks to claim in such a way as to demonstrate that the applicant was in possession of the claimed invention. *See Ariad Pharm., Inc. v. Eli Lilly and Co.* 598 F.3d 1336, 1351 (Fed. Cir. 2010). A patentee demonstrates possession of the invention by describing it "in sufficient detail that one skilled in the art can clearly conclude that the inventor invented the claimed invention." *Lockwood v. Am. Airlines, Inc.*, 107 F.3d 1565, 1572 (Fed. Cir. 1997).

ambiguity lies not on the breadth of the term, which is indeed broad, but rather that the term does not provide notice as to that which it seeks to cover. ³ Claim 25 is additionally indefinite because it depends from a canceled claim.

In clear contrast is Appellants' Specification, which does not describe the claimed requirements except by way of a single structure that is said to satisfy each requirement. The Specification indicates that Appellants invented an air grate having a particular 1 inch opening that covers 40% or less of the span which it covers and that has a 1/2 inch raised edge for spill protection. Spec., paras. 21, 24, and 27. The Specification does not describe all means of how to meet any and all potential spill protection requirements, for example, but rather provides an example of one structure that is said to address a spill protection requirement. Appellants' Specification discloses neither a representative number of examples (species) falling within the scope of the genus of air grates satisfying the claimed spill protection requirement nor structural features common to members of the genus so as to permit one of skill in the art to "'visualize or recognize' the members of the genus." See Ariad, 598 F.3d at 1350. In effect, Appellants' Specification and claims merely recite a description of a problem to be solved while claiming all solutions to it, covering all air grates later actually invented and determined to fall within the claims' functional boundaries. See id. at 1353. Appellants' disclosure is similarly lacking for the other functional requirements.

Appellants must demonstrate possession of the invention, not merely that which makes it obvious. *Id.* at 1571-72. The examples in the Specification are not indicative of a disclosure describing an invention of an air grate able to satisfy an air flow, fall through, or spill protection requirement *as claimed*. Put another way, the Specification merely describes one variant of something that fits within the claims' scope, but does not describe the invention as recited in claims 1, 9, 16, and 23. *See id.*

at 1572 ("it is not a question of whether one skilled in the art *might* be able to construct the patentee's device from the teachings of the disclosure [but] whether the application necessarily discloses that particular device") (internal citation and quotation omitted). Likewise, while the dependent claims may recite a particular requirement described in the Specification for one or more of the claimed functions, none of the dependent claims recite a particular requirement for each of the claimed functions such as to demonstrate possession of an invention having all of the claimed functions. Therefore, we enter a new ground of rejection under 35 U.S.C. § 112, first paragraph, of claims 1-23, 25, and 26 because these claims lack a written description sufficient to demonstrate that Appellants, at the time of invention, had possession of the invention as claimed.

The Prior Art Rejection

For the reasons discussed above, claims 1-23, 25, and 26 are indefinite. Nevertheless, even if the metes and bounds of the limitations in question could be ascertained, the Examiner's rejection fails. The Examiner states that functions (1)-(3) do not patentably distinguish the claim over the prior art of record. Ans. 3-4. However, the Examiner has not made factual findings that the particular structures in Rapisarda and/or Hampel are actually capable of performing these functions, or articulated an apparent reason, with rational underpinning, as to why it would have been obvious to modify them so as to satisfy these limitations. This is not to say that, for example, Rapisarda is not capable of "meet[ing] a semiconductor device manufacturing fall through object size limitation," but rather, that the Examiner has not established that the structures in Rapisarda and/or Hampel are capable, or that it would have been obvious to modify those structures to

be capable, as such. *See In re Warner*, 379 F.2d 1011, 1017 (CCPA 1967) (the examiner has the initial duty of supplying the requisite factual basis and may not, because of doubts that the invention is patentable, resort to speculation, unfounded assumptions, or hindsight reconstruction to supply deficiencies in the factual basis); *see also In re Oetiker*, 977 F.2d 1443, 1445 (Fed. Cir. 1992); *In re Piasecki*, 745 F.2d 1468, 1472 (Fed. Cir. 1984). Therefore, the Examiner has not met the initial burden in establishing a prima facie case of obviousness with respect to claim 1. The rejection of claims 2-23, 25, and 26 falls with the rejection of claim 1 because the Examiner's rejection of these claims similarly does not articulate the requisite factual findings and analysis regarding the claimed functional requirements.

DECISION

We reverse the Examiner's decision regarding claims 1-23, 25, and 26. Pursuant to our authority under 37 C.F.R. § 41.50(b) (2010), we enter a new ground of rejection of claims 1-23, 25, and 26 under 35 U.S.C. § 112, second paragraph, as indefinite, and under 35 U.S.C. § 112, first paragraph, as lacking written description support.

FINALITY OF DECISION

This decision contains new grounds of rejection pursuant to 37 C.F.R. § 41.50(b). 37 C.F.R. § 41.50(b) provides "[a] new ground of rejection pursuant to this paragraph shall not be considered final for judicial review."

37 C.F.R. § 41.50(b) also provides that Appellant, WITHIN TWO MONTHS FROM THE DATE OF THE DECISION, must exercise one of

Application 10/802,378

the following two options with respect to the new grounds of rejection to avoid termination of the appeal as to the rejected claims:

- (1) Reopen prosecution. Submit an appropriate amendment of the claims so rejected or new evidence relating to the claims so rejected, or both, and have the matter reconsidered by the examiner, in which event the proceeding will be remanded to the examiner....
- (2) *Request rehearing*. Request that the proceeding be reheard under § 41.52 by the Board upon the same record....

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a). *See* 37 C.F.R. § 1.136(a)(1)(iv) (2007).

REVERSED; 37 C.F.R. § 41.50(b)

hh

Schwabe Williamson & Wyatt PACWEST CENTER, SUITE 1900 1211 SW FIFTH AVENUE PORTLAND, OR 97204